

Title (en)

Data compression and decompression method between digital unit and radio unit in cloud radio access network

Title (de)

Datenkomprimierungs- und Dekomprimierungsverfahren zwischen digitalen Einheiten und Funkeinheit in einem Cloud-Funkzugriffsnetzwerk

Title (fr)

Procédé de compression et de décompression de données entre une unité numérique et une unité radio dans un réseau d'accès radio en nuage

Publication

EP 2802078 B1 20200415 (EN)

Application

EP 14166338 A 20140429

Priority

KR 20130052642 A 20130509

Abstract (en)

[origin: US8842724B1] A method of compressing In-phase/Quadrature (I/Q) data transmitted and received between a Digital Unit (DU) and a Radio Unit (RU) in a Cloud Radio Access Network (CRAN) structure is disclosed. The method includes (a) calculating a minimum value DiMSB among meaningless higher-order bit digits Di,jMSB with respect to each of j-th I/Q samples having a predetermined resolution among i-th unit blocks that are units of compression, and (b) transmitting each of the samples after each of the samples is converted into a binary number and DiMSB number of higher-order bits, excluding a sign bit, are removed.

IPC 8 full level

H03M 7/04 (2006.01)

CPC (source: EP KR US)

H03M 7/04 (2013.01 - EP US); **H03M 7/3062** (2013.01 - US); **H04B 7/14** (2013.01 - KR)

Cited by

CN109314523A; WO2020125527A1; WO2018098706A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

US 8842724 B1 20140923; EP 2802078 A1 20141112; EP 2802078 B1 20200415; JP 2014220810 A 20141120; JP 5764237 B2 20150819; KR 101410249 B1 20140620

DOCDB simple family (application)

US 201313903356 A 20130528; EP 14166338 A 20140429; JP 2014094907 A 20140502; KR 20130052642 A 20130509